



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
<del>11/539,293</del> <b>10/539,293</b> 23900 7590 J C PATENTS, INC. 4 VENTURE, SUITE 250 IRVINE, CA 92618	10/06/2006  07/27/2007	Chun Po Chang	JCLA17607	3433
			EXAMINER MUROMOTO JR, ROBERT H	
			ART UNIT 3765	PAPER NUMBER
			MAIL DATE 07/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Supplemental  
Office Action Summary

Application No.

10/539,293

~~11/539,293~~

Applicant(s)

CHANG ET AL.

Examiner

Robert H. Muromoto, Jr.

Art Unit

3765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-9 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7-9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz US patent 4,227,553 in view of Koch US patent 4,342,339.

'553 teaches, "A dobby 2 (or any shed forming mechanism) is mounted on a weaving machine 1 in FIG. 1, which dobby systematically drives a plurality of heddle frames 6 through plural rocker arms 3 and cords 4 which are guided over guide rollers 5. Each heddle frame 6 is biased by tension springs 7 in a direction counter to the movement generated by the dobby. The heddle frame 6 is enclosed laterally by heddle frame guides 8, the guides on the right side of FIG. 1 are not shown for reasons of providing a clearer view of a rocking lever 99 to be described below."

Art Unit: 3765

Figure 7 clearly shows a heddle rail 19, 17 as claimed. Also spring 82, member 81 and rail 19 in figure 7 interact as recited.

Figure 8 shows the rod 13 under the influence of spring 83 and lever 84 or slot cam surface 85 resisting the spring force to act as the so-called "adjusting device" as recited.

Figures 1, 7 and 8 all show variations of support and a resiliently yielding part as recited.

Although Schwarz teaches all of the limitations as cited above, Schwarz does not teach a heddle rail that receives a heddle with a spring means provided.

However, '339 does teach," A weaving heddle includes an elongated heddle shaft having U-hook shaped end loops at opposite ends for holding the heddle on opposed heddle carrying rods of a heddle frame. The loops include shanks for overlapping with the rods, and the loops have inner support surfaces spaced a predetermined distance apart and extending transversely of the shaft for engagement with the rods. **One of such support surfaces is resiliently biased toward the other of such surfaces for accommodating any increase in such predetermined distance (abstract).**"

Therefore it would have been obvious to one of ordinary skill in the art to use heddles with resiliently biasing (spring means) surfaces to accommodate any increase in the distance between the heddle and the members carrying the heddles (heddle rail).

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schwarz in view of DE 3021163.

Although Schwarz teaches all of the limitations as cited above, Schwarz does not teach the shaft frame having at least three drive points spaced in the transverse direction of heddle frame movement.

However, '163 does clearly teach in figure 1, three such points of connection. Further, '163 teaches, "This arrangement provides a rigid, distortion-free connection between the levers (for heald frames of extreme length), which is easily assembled and disassembled for ease of transport (derwent abstract)."

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use the three driving point connection system to provide a heald frame (shaft frame) with a rigid, distortion free connection between the drive means and the heald frame.

#### **Comments with regards to reopening of instant application**

TC 3700 ordered reopening of instant application. The limitations in claims 7-9 are already disclosed and or taught by references above. Recitations "spring legs" and "jibs" are broad enough to be encompassed by rejections above.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert H. Muromoto, Jr. whose telephone number is 571-272-4991. The examiner can normally be reached on 8-530, M-F.

Art Unit: 3765

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bobby Muromoto  
/Bobby Muromoto/  
Patent examiner (partial signatory authority)  
Art unit 3765  
July 20, 2007